Listing and Amendments to the Claims

Claims 10-18 are canceled and claims 19-26 are newly added.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 – 18. (CANCELLED)

19. (NEW)   A method for processing video pictures, the video picture consisting of pixels, the pixels being digitally coded with at least one digital code word, wherein to each bit of a digital code word a certain duration is assigned, defining a sub-field, during which the whole pixel or a component of the pixel is activated, wherein a motion vector is calculated for a pixel, and the motion vector is used for re-coding the sub-field code word of the pixel, wherein the motion vector calculation is made in a manner that the resulting motion vector determines for a current pixel from which location in a previous video picture the current pixel comes from, wherein the re-coding step includes a step of calculating drag coordinates for one or more of the sub-field code word bits of the current pixel based on the calculated motion vector, and wherein the drag coordinates are used for selecting a pixel in the video picture and using the corresponding bit of the sub-field code word of the selected pixel to determine the corresponding bit of the new sub-field code word of the current pixel.

20. (NEW)   The method according to claim 19, wherein the calculation of the drag coordinates is made according to the formula:

$$\Delta x_n = -\frac{Vx \cdot G(n)}{Dur(F)} \quad \text{and} \quad \Delta y_n = -\frac{Vy \cdot G(n)}{Dur(F)}$$

wherein Δx_n represents the relative position in x-direction of a pixel from which the sub-field code word bit needs to be taken for the current pixel;

Δy_n represents the relative position in y-direction of a pixel from which the sub-field code word bit needs to be taken for the current pixel;

V_x is the x-component of the motion vector and V_y is the y-component of the motion vector;

$G(n)$ represents the center of gravity position of the sub-field in the frame period;

n is the current sub-field number and

Dur(F) is the duration of the frame.

21. (New)   The method according to claim 19, wherein to a pixel three sub-field code words are assigned, one for each colour component.

22. (New)   The method according to claim 19, wherein a sub-field is a sub-period of a video frame period consisting of an addressing period, a sustaining period and an erasing period.

23. (New)   The method according to claim 20, wherein the center of gravity (CG) of each sub-field (SF) in a frame period is calculated according to the formula:

$G(n) = S(n) + Dur(n)/2$

wherein $G(n)$ represents the center of gravity location in the frame period;

n is the current sub-field number,

$S(n)$ represents the start position of the current sub-field;

and $Dur(n)$ represents the duration of the current sub-field.

24. (NEW) An apparatus for processing video pictures, the video pictures consisting of pixels, the pixels being digitally coded with at least one digital code word, wherein to each bit of a digital code word a certain duration is assigned, hereinafter called sub-field, during which the whole pixel or a component of the pixel is activated, the apparatus comprising:

- a motion estimator for calculating motion vectors for the pixels of a current video picture by comparing a current video picture with at least one previous video picture, the resulting motion vector being defined to determine for a current pixel from which location in a previous video picture the current pixel comes from,

- a sub-field re-coding unit in which drag coordinates for one or more of the sub-field code word bits of the current pixel based on the calculated motion vector are calculated, and a selection unit, in which the drag coordinates are used for selecting a pixel in a video picture and using the corresponding bit of the sub-field

code word of the selected pixel to determine the corresponding bit of the new sub-field code word of the current pixel.

25. (New)   The apparatus according to claim 24, further comprising a matrix display.

26. (New)   The apparatus according to claim 25, wherein the matrix display comprises one of a plasma, liquid crystal on silicon, and digital micro mirror array display.